## **QUARTERLY REPORT**

November 1st, 2004 to January 31st 2005

### **Project Title**

Montana Department of Transportation (MDT)

Determine Current Rates of Motor Fuel Tax Evasion in the State of Montana

### **Principal Investigator**

Patrick Balducci Principal Research Scientist Battelle Memorial Institute

#### **Research Assistants**

The work performed under this contract has been performed by the Battelle Memorial Institute with the assistance of our subcontractor, Montana State University.

#### Introduction

This second quarterly report covers the period beginning November 1, 2004 and ending on January 31, 2005. During the last quarter, the research team focused primarily on activities outlined in Task 1c (report on the degree of effectiveness and reason thereof with the controlling of fuel tax evasion in the neighboring states and provinces), Task 2 (comparative assessment of neighboring states'/provinces' enforcement programs) and Task 3 (analysis of tax codes and legislation) as described below in the Work Progress section of this report. The next section provides an overview of the project objective. The report also provides an overview of the progress completed to date and a projection of work to be performed in the next quarter. Finally, the report compares anticipated budget/work completed to the project schedule.

### **Project Objective**

The primary objective of the research project is to determine the extent and underlying reasons for motor fuel tax evasion in Montana. The project will also generate recommendations concerning where best to focus enforcement efforts and make changes to tax code to close the gap between total tax liability and actual tax collections in Montana. The specific objectives of the project are to:

- Critically assess administrative and enforcement characteristics of border state practices, identify how these characteristics have traditionally correlated with certain types of evasion and compare these programs to Montana State practices.
- Identify evasion techniques and note administrative, enforcement and legislative strategies used to curtail motor fuel tax evasion.
- Identify and examine data that could be used to assist Montana in measuring motor fuel tax evasion.
- Develop and demonstrate a methodology for estimating state motor fuel tax evasion.
- Develop recommendations for making changes to the current administrative, enforcement and legislative framework established for the motor fuel tax program in Montana and perform benefit-cost analysis to rank these proposed changes based on the computed benefit-cost ratio for each proposed programmatic change.

## **Work Progress**

Work completed to date has focused primarily on activities outlined in Tasks 1, 2 and 3, though the research team has now begun work on Tasks 4 and 5 as well. The Battelle research team has finished Task 1c, which marks the completion of all work on Task 1. Completion of Task 2 encompassed the preparation of an interview protocol, completion of interviews with fuel tax administrators from states and provinces bordering Montana, submission of follow-up requests to interviewees for additional information and data related to fuel tax audit and enforcement programs and the completion of additional research on the various elements of each jurisdiction's program. The research team also drafted further sections regarding tax code issues for the Task 3 analysis. A summary of each activity performed, along with percentage of work completed by task, follows:

- Task 1 Kickoff Meeting, Literature Review, Enforcement/Compliance Activities
  - o Documented evasion rates at the federal and state level identified though the literature review and interviews conducted in Task 2.
  - o Identified schemes used to evade remitting the appropriate state taxes on motor fuels to state collection agencies.

• Prepared a report highlighting best fuel tax administration and enforcement practices.

Task 1 represents 16.8% of both the total work effort and the budget. Task 1 is 100% complete.

- Task 2 Impact of Enforcement Programs
  - o Completed interviews with representatives from states and provinces bordering Montana.
  - O Submitted follow-up requests to interviewees for additional information and data related to fuel tax audit and enforcement programs.
  - Carried out additional research on the various elements of each jurisdiction's motor fuel tax program.
  - o Drafted sections of the Task 2 report.

Task 2 represents 10.9% of both the total work effort and budget. Task 2 is 60% complete.

- Task 3 Analysis of Tax Codes, Legislation
  - o Examined relevant literature / legal codes.
  - o Drafted sections of the Task 3 report.

Task 3 represents 8.9% of both the total work effort and budget. Task 3 is 50% complete.

- Task 4 Interview Representatives of Entities Involved with Fuel Distribution
  - Obtained a list of entities involved in fuel distribution within the State of Montana
  - o Initiated development of an interview protocol

Task 4 represents 5.6% of both the total work effort and budget. Task 4 is 20% complete.

- Task 5 Examination of Fuel Distribution and Compliance Programs
  - o Reviewed and analyzed data required to populate the GIS database.

Task 5 represents 10.9% of both the total work effort and budget. Task 5 is 10% complete.

No work has been performed on Tasks 6-10.

#### **Issues**

The most significant issue faced by the project team to date has been the need to complete other prior work commitments. This issue has been addressed through the: a) completion of other, prior work commitments, and b) addition of research staff. We have taken these steps to accelerate task completion and ensure that all reports will be provided on-time and within budget.

### **Major Accomplishments or Discoveries**

The Battelle Team has completed interviews with representatives of motor fuel tax agencies in each of Montana's bordering states and provinces. These interviews focused on gathering information relating to historical and present compliance and enforcement efforts within each bordering jurisdiction. The information gathered from these interviews has indicated that motor fuel tax administration, compliance and enforcement programs differ, significantly in some cases, from jurisdiction to jurisdiction. Often, these states and provinces have found their own unique solutions and program adjustments to reflect their unique circumstances.

The Battelle research team discovered significant differences between bordering jurisdictions regarding the point of taxation, which ranged from taxation at the terminal rack for all fuels to tax collection through appointed bulk dealers. However, most jurisdictions that do not currently tax at the terminal level noted that taxing at the rack is preferable to current practice and a shift in the point of taxation is under consideration. One jurisdiction that moved the point of taxation to the terminal rack relatively recently had observed a marked (roughly 6 percent) increase in tax collections, over and above the amount predicted due to a general increase in vehicle miles of travel and resultant motor fuel consumption.

One interesting difference discovered through the interviews was how these bordering jurisdictions dealt fuel sold on Indian reservations – which have been a recognized issue for fuel taxing agencies since there are many potential opportunities for tax evasion given the tax-free status of fuel used by Native North Americans. The presence of these reservations was noted as a potentially significant source of evasion for some jurisdictions. Some of the states and provinces interviewed explained the agreements they have in place to deal with this issue (e.g. institutionalized refund systems for reservation fuel use and an agreed upon amount of fuel tax exemption for gallons of fuel consumed on a reservation based on the number of Native North Americans living on a particular reservation and an average per-person fuel consumption assumption). One province noted that it had instituted a system whereby Native North Americans were required to present a card to licensed motor fuel retailers on reservations in order to purchase tax exempt fuel. Further, the retailer was required to record the number of the card and tie it to the fuel purchase.

Another significant difference between jurisdictions involves the intensity of enforcement activities. Some states have active enforcement of dyed fuel requirements while others do not. Some are able to rely on the IRS dyed fuel enforcement efforts. Some jurisdictions have the authority to stop diesel vehicles to test for dyed fuels while others are limited by laws requiring probable cause and do not stop vehicles unless they are being stopped for another reason. Due to various legal barriers, one province noted that they were not able to perform on-road tank inspections and had to rely on provincial law enforcement to intermittently inspect fuel tanks at designated safety and weigh station sites.

The following topics were covered in the interviews:

- Point of taxation;
- Treatment of blending fuels;
- The use of fuel tracking systems, electronic or a combination of software utilities and manual tracking;
- The level of resources expended to enforce programs and audit industry;
- The focus of the enforcement efforts (e.g., in-office versus field operations);
- Sharing of import/export data with neighboring states;
- The presence of agreements with Native North American Tribes;
- The extent of uniformity between tax systems in neighboring states/provinces;
- Ability to use seizure laws to aid motor fuel tax enforcement/collections;
- The ability to suspend operations when detecting fraudulent activity;
- The impact of dedicated legal staff to the prosecution of motor fuel tax evasion;
- Overall structure of audit and enforcement personnel
- Fine and penalty levels;
- Prevalence of roadside inspection and tank dipping:
- Ability to deny licenses based on outstanding tax liability or fraudulent activities conducted in other states:
- The licensing requirements for entities that obtain tax-free motor fuel;
- Treatment of refunds:
- Fuel dyeing practices; and
- Public awareness campaigns.

The information collected to date will help form the foundation of the comparative assessment of state programs, the methodology used to model motor fuel tax evasion and the recommendations we provide for closing gaps in Montana's motor fuel tax program.

## **Work Projection**

During the next quarter, ending January 31 of 2005, we plan to perform the following activities:

• Complete the Task 2 comparative analysis of enforcement programs.

- Complete the Task 3 analysis of tax codes, administrative rules and motor fuel tax legislation.
- Complete work on the Task 4 industry enforcement activities analysis by conducting interviews with industry representatives.
- Complete work on Task 5 by identifying data sources, collecting data required to produce GIS maps of the region's motor fuel distribution system, and preparing a report comparing Montana's domestic program with those found in bordering states and provinces.
- Begin work on the analysis of data required to support evasion modeling.

#### Schedule

The project is behind schedule and under budget when comparing the work performed to date with the budget expended on each task. As shown in Figure 1, we targeted Task 1 for 100% completion, Task 2 for 100% completion, Task 3 for 100% completion, Task 4 for 75% completion and Task 5 for 50% completion at the end of this quarter. Thus far, Task 1 is 100% complete, Tasks 2 is 100% complete and Tasks 3-5 are behind schedule at 60%, 20% and 10% completed, respectively. However, other work commitments are in the process of being finalized and we have added staff to ensure that this project is brought back on schedule and all deliverables are provided on-time and within budget.

# 1.2 1.2 1.2 0.8 0.4 0.4

■ Actual Percent Complete

**Tasks Percent Complete through Current Quarter** 

Figure 1 – Work Progress through January 31, 2005.

Task 3

■ Scheduled Percent Complete

Task 2

Task 1

Task 10

### **Budget**

The project budget identified roughly \$59,398 for the second quarter of the research plan but only \$9,415 was expended. The total budget through the first two quarters of the research plan totals \$87,642. To date, the research team has only expended roughly \$30,302 or 35% of the total amount budgeted (Figure 2).

# Montana Motor Fuel Tax Evasion - Budget Summary

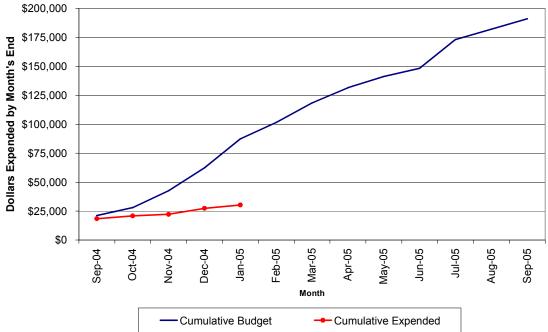


Figure 2 – Projected and Actual Expenditures through January 31, 2005.

# Budgeted and Projected Expenditures – State and Federal Fiscal Years (SFY and FFY) 2004 and 2005

Table 1 presents an analysis of the project budget, including the total project budget, total invoiced through January 31 of 2005, the remainder of the project budget, total expenditures through SFY and FFY 2004 and projected expenditures through SFY and FFY 2005. Costs for all tasks will be incurred in the State of Montana's FY 05 (July 1, 2004 – June 30, 2005), with the exception of a portion of those incurred on Tasks 8 and 9, and all of Task 10. Those tasks will carry into the State of Montana's FY 06 (July 1, 2005 – June 30, 2006). The remainder of the unexpended balance (\$160,777) will be totally expended during FFY 2005 (October 1, 2004 – September 30, 2005).

Table 1 Budgeted and Projected Expenditures for State and Federal Fiscal Years (SFY and FFY) 2004 and 2005.

Budget Items	Budgeted/Projected	Actual
Total Budget	\$191,079	\$191,079
Total invoiced through January 31, 2005	\$87,462	\$30,302
Total project budget remaining as of January		
31, 2005	\$103,617	\$160,777
Total expenditures through SFY 2004	0	0
Total expenditures through FFY 2004	\$21,160	\$18,501
SFY 2005 expenditures	\$148,356	\$30,302 <sup>1</sup>
FFY 2005 expenditures	\$169,919	\$11,800 <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Actual amounts represent those expended within SFY and FFY 2005 through January 31, 2005.